

MADERA COUNTY

ENGINEERING AIDE

DEFINITION

Under general supervision, to perform routine and responsible drafting, surveying, and other sub-professional office and field engineering assignments; and to do related work as required.

SUPERVISION EXERCISED

Exercises no supervision.

EXAMPLES OF IMPORTANT AND ESSENTIAL DUTIES

Assists with the preparation of plans and specifications for County engineering projects; prepares or assists with engineering computations; prepares graphs and charts; performs or assists with field surveying and staking assignments; reduces field survey notes in the office, assisting with the computation of traverses, grades, closures, distances, areas, and angles; assists with the review of survey maps for accuracy and compliance with requisite laws and regulations; maintains records and prepares reports; answers inquiries from the public; assists with compiling, checking, and filing engineering data; assists with construction, flood control, and drainage inspections; searches records for property descriptions; operates blue print equipment and develop prints; may record maps and other documents.

OTHER JOB RELATED DUTIES

Performs related duties and responsibilities as assigned.

JOB RELATED AND ESSENTIAL QUALIFICATIONS

Knowledge of:

Principles and uses of geometry, algebra, and trigonometry.
Drafting methods, equipment, and techniques.
Basic knowledge of civil engineering principles and practices.

Skill to:

Operate field survey and blueprint equipment.
Operate a motor vehicle safely.

Ability to:

Perform office and field engineering work.
Make accurate engineering computations.
Perform drafting assignments.
Prepare clear and accurate notes and reports.
Effectively represent the Department to the public.
Communicate clearly and concisely, both orally and in writing.
Establish, maintain, and foster positive and harmonious working relationships with those contacted in the course of work.

Experience and Training Guidelines:

Any combination equivalent to experience and training that would provide the required knowledge, skills, and abilities would be qualifying. A typical way to obtain the knowledge, skills, and abilities would be:

Experience:

Some experience performing basic engineering assistance work is highly desirable.

Training:

Equivalent to the completion of the twelfth grade supplemented by specialized course work in drafting, algebra, geometry, and trigonometry.

License or Certificate:

Possession of, or ability to obtain, an appropriate, valid driver's license.

Special Requirements:

Essential duties require the following physical skills and work environment:

Ability to sit, stand, walk, kneel, crouch, stoop, squat, twist, climb, and lift 30 lbs.; exposure to cold, heat, noise, outdoors, vibration, confining work space, chemicals, explosive materials, mechanical hazards, and electrical hazards; ability to travel to different sites and locations.

Effective Date: May, 1995